

# ANNEX, GLOSSARY AND LIST OF ABBREVIATIONS

## ANNEX A

### DEFINITIONS FOR SELECTED ENERGY-RELATED TECHNOLOGY FIELDS

Energy-related technologies	International Patent Classification (IPC) Symbols
Solar energy technology	F24J 2/00, F24J 2/02, F24J 2/04, F24J 2/05, F24J 2/06, F24J 2/07, F24J 2/08, F24J 2/10, F24J 2/12, F24J 2/13, F24J 2/14, F24J 2/15, F24J 2/16, F24J 2/18, F24J 2/23, F24J 2/24, F24J 2/36, F24J 2/38, F24J 2/42, F24J 2/46, F03G 6/06, G02B 5/10, H01L 31/052, E04D 13/18, H01L 31/04, H01L 31/042, H01L 31/18, E04D 1/30, G02F 1/136, G05F 1/67, H01L 25/00, H01L 31/00, H01L 31/048, H01L 33/00, H02J 7/35, H02N 6/00
Fuel cell technology	H01M 4/00, H01M 4/86, H01M 4/88, H01M 4/90, H01M 8/00, H01M 8/02, H01M 8/04, H01M 8/06, H01M 8/08, H01M 8/10, H01M 8/12, H01M 8/14, H01M 8/16, H01M 8/18, H01M 8/20, H01M 8/22, H01M 8/24
Wind energy	F03D 1/00, F03D 3/00, F03D 5/00, F03D 7/00, F03D 9/00, F03D 11/00, B60L 8/00
Geothermal energy	F24J 3/08, F03G 4/00, F03G 7/05

Note: For a definition of IPC symbols, see [www.wipo.int/classifications/ipc/en/](http://www.wipo.int/classifications/ipc/en/). The correspondence between IPC symbols and technology fields is not always clear-cut. Therefore, it is difficult to capture all patents in a specific technology field. Nonetheless, the IPC-based definitions of the four technologies presented above are likely to capture the vast majority of related patents.

Source: WIPO

# ANNEX B

## INTERNATIONAL CLASSIFICATION OF GOODS AND SERVICES UNDER THE NICE AGREEMENT

<b>Class Headings</b>	<b>Products</b>
Class 1	Chemicals used in industry, science and photography, as well as in agriculture, horticulture and forestry; unprocessed artificial resins, unprocessed plastics; manures; fire extinguishing compositions; tempering and soldering preparations; chemical substances for preserving foodstuffs; tanning substances; adhesives used in industry
Class 2	Paints, varnishes, lacquers; preservatives against rust and against deterioration of wood; colorants; mordants; raw natural resins; metals in foil and powder form for painters, decorators, printers and artists
Class 3	Bleaching preparations and other substances for laundry use; cleaning, polishing, scouring and abrasive preparations; soaps; perfumery, essential oils, cosmetics, hair lotions; dentifrices
Class 4	Industrial oils and greases; lubricants; dust absorbing, wetting and binding compositions; fuels (including motor spirit) and illuminants; candles and wicks for lighting
Class 5	Pharmaceutical and veterinary preparations; sanitary preparations for medical purposes; dietetic substances adapted for medical use, food for babies; plasters, materials for dressings; material for stopping teeth, dental wax; disinfectants; preparations for destroying vermin; fungicides, herbicides
Class 6	Common metals and their alloys; metal building materials; transportable buildings of metal; materials of metal for railway tracks; non-electric cables and wires of common metal; ironmongery, small items of metal hardware; pipes and tubes of metal; safes; goods of common metal not included in other classes; ores
Class 7	Machines and machine tools; motors and engines (except for land vehicles); machine coupling and transmission components (except for land vehicles); agricultural implements other than hand-operated; incubators for eggs
Class 8	Hand tools and implements (hand-operated); cutlery; side arms; razors
Class 9	Scientific, nautical, surveying, photographic, cinematographic, optical, weighing, measuring, signaling, checking (supervision), life-saving and teaching apparatus and instruments; apparatus and instruments for conducting, switching, transforming, accumulating, regulating or controlling electricity; apparatus for recording, transmission or reproduction of sound or images; magnetic data carriers, recording discs; automatic vending machines and mechanisms for coin-operated apparatus; cash registers, calculating machines, data processing equipment and computers; fire-extinguishing apparatus
Class 10	Surgical, medical, dental and veterinary apparatus and instruments, artificial limbs, eyes and teeth; orthopedic articles; suture materials
Class 11	Apparatus for lighting, heating, steam generating, cooking, refrigerating, drying, ventilating, water supply and sanitary purposes
Class 12	Vehicles; apparatus for locomotion by land, air or water
Class 13	Firearms; ammunition and projectiles; explosives; fireworks
Class 14	Precious metals and their alloys and goods in precious metals or coated therewith, not included in other classes; jewellery, precious stones; horological and chronometric instruments
Class 15	Musical instruments
Class 16	Paper, cardboard and goods made from these materials, not included in other classes; printed matter; bookbinding material; photographs; stationery; adhesives for stationery or household purposes; artists' materials; paint brushes; typewriters and office requisites (except furniture); instructional and teaching material (except apparatus); plastic materials for packaging (not included in other classes); printers' type; printing blocks
Class 17	Rubber, gutta-percha, gum, asbestos, mica and goods made from these materials and not included in other classes; plastics in extruded form for use in manufacture; packing, stopping and insulating materials; flexible pipes, not of metal
Class 18	Leather and imitations of leather, and goods made of these materials and not included in other classes; animal skins, hides; trunks and travelling bags; umbrellas, parasols and walking sticks; whips, harness and saddlery

Class 19	Building materials (non-metallic); non-metallic rigid pipes for building; asphalt, pitch and bitumen; non-metallic transportable buildings; monuments, not of metal
Class 20	Furniture, mirrors, picture frames; goods (not included in other classes) of wood, cork, reed, cane, wicker, horn, bone, ivory, whalebone, shell, amber, mother-of-pearl, meerschaum and substitutes for all these materials, or of plastics
Class 21	Household or kitchen utensils and containers; combs and sponges; brushes (except paint brushes); brush-making materials; articles for cleaning purposes; steelwool; unworked or semi-worked glass (except glass used in building); glassware, porcelain and earthenware not included in other classes
Class 22	Ropes, string, nets, tents, awnings, tarpaulins, sails, sacks and bags (not included in other classes); padding and stuffing materials (except of rubber or plastics); raw fibrous textile materials
Class 23	Yarns and threads, for textile use
Class 24	Textiles and textile goods, not included in other classes; bed and table covers
Class 25	Clothing, footwear, headgear
Class 26	Lace and embroidery, ribbons and braid; buttons, hooks and eyes, pins and needles; artificial flowers
Class 27	Carpets, rugs, mats and matting, linoleum and other materials for covering existing floors; wall hangings (non-textile)
Class 28	Games and playthings; gymnastic and sporting articles not included in other classes; decorations for Christmas trees
Class 29	Meat, fish, poultry and game; meat extracts; preserved, frozen, dried and cooked fruits and vegetables; jellies, jams, compotes; eggs, milk and milk products; edible oils and fats
Class 30	Coffee, tea, cocoa, sugar, rice, tapioca, sago, artificial coffee; flour and preparations made from cereals, bread, pastry and confectionery, ices; honey, treacle; yeast, baking-powder; salt, mustard; vinegar, sauces (condiments); spices; ice
Class 31	Agricultural, horticultural and forestry products and grains not included in other classes; live animals; fresh fruits and vegetables; seeds, natural plants and flowers; foodstuffs for animals, malt
Class 32	Beers; mineral and aerated waters and other non-alcoholic drinks; fruit drinks and fruit juices; syrups and other preparations for making beverages
Class 33	Alcoholic beverages (except beers)
Class 34	Tobacco; smokers' articles; matches

<b>Class Headings</b>	<b>Services</b>
Class 35	Advertising; business management; business administration; office functions
Class 36	Insurance; financial affairs; monetary affairs; real estate affairs
Class 37	Building construction; repair; installation services
Class 38	Telecommunications
Class 39	Transport; packaging and storage of goods; travel arrangement
Class 40	Treatment of materials
Class 41	Education; providing of training; entertainment; sporting and cultural activities
Class 42	Scientific and technological services and research and design relating thereto; industrial analysis and research services; design and development of computer hardware and software
Class 43	Services for providing food and drink; temporary accommodation
Class 44	Medical services; veterinary services; hygienic and beauty care for human beings or animals; agriculture, horticulture and forestry services
Class 45	Legal services; security services for the protection of property and individuals; personal and social services rendered by others to meet the needs of individuals

Note: See [www.wipo.int/classifications/nivilo/nice/index.htm?lang=EN](http://www.wipo.int/classifications/nivilo/nice/index.htm?lang=EN) for further information on the International Classification of Goods and Services under the Nice Agreement.

Source: WIPO

## CLASS GROUPS DEFINED BY EDITAL®

<b>Industry sector</b>	<b>Nice classes</b>
Agricultural products and services	29, 30, 31, 32, 33, 43
Management, Communications, Real estate and Financial services	35, 36
Chemicals	1, 2, 4
Textiles - Clothing and Accessories	14, 18, 22, 23, 24, 25, 26, 27, 34
Construction, Infrastructure	6, 17, 19, 37, 40
Pharmaceuticals, Health, Cosmetics	3, 5, 10, 44
Household equipment	8, 11, 20, 21
Leisure & Education = Leisure, Education, Training	13, 15, 16, 28, 41
Scientific research, Information and Communication technology	9, 38, 42, 45
Transportation and Logistics	7, 12, 39

Source: Edital®

## GLOSSARY

This glossary seeks to assist readers in better understanding key technical terms and concepts. Many of the terms are defined generically (e.g., “application”), but apply to several or all of the various forms of IP covered in this report.

**Applicant:** An individual or other legal entity that files an application for a patent, utility model, trademark or industrial design. There may be more than one applicant in an application. For the statistics presented in this publication, the name of the first-named applicant is used to determine the owner of the application.

**Application:** The procedure for requesting IP rights at an office, which examines the application and decides whether to grant or refuse protection. Application also refers to a set of documents submitted to an office by the applicant.

**Application abroad:** For statistical purposes, an application filed by a resident of a given state/jurisdiction with an IP office of another state/jurisdiction. For example, an application filed by an applicant domiciled in France with the JPO is considered an “application abroad” from the perspective of France. This differs from a “non-resident application”, which describes an application filed by a resident of a foreign state/jurisdiction from the perspective of the office receiving the application.

**Application date:** The date on which the IP office receives an application that meets the minimum requirements. Application date is also referred to as the filing date.

**Budapest Treaty:** Disclosure of an invention is a requirement for the granting of a patent. Normally, an invention is disclosed by means of a written description. Where an invention involves a microorganism or the use of a microorganism, disclosure is not always possible in writing but can sometimes only be effected by the deposit, with a specialized institution, of a sample of the microorganism. In order to eliminate the need to deposit a microorganism in each country in which patent protection is sought, the

Budapest Treaty provides that the deposit of a microorganism with any “international depositary authority” (IDA) suffices for the purposes of patent procedure before the national patent offices of all contracting states and before any regional patent office (where such a regional office recognizes the effects of the Treaty).

**Class:** Refers to the classes defined in the Locarno and Nice Classifications. Classes indicate the categories of products and services (where applicable) for which trademark or industrial design protection is requested. (See “Locarno Classification” and “Nice Classification”.)

**Class count:** The number of classes specified in a trademark application or registration. In the international trademark system and at certain offices, an applicant can file a trademark application that specifies one or more of the 45 goods and services classes of the Nice Classification. Offices use either a single- or multi-class filing system. For example, the offices of Japan, the Republic of Korea and the United States of America (US) as well as many European offices have multi-class filing systems. The offices of Brazil, China and Mexico follow a single-class filing system, requiring a separate application for each class in which applicants seek trademark protection. To capture the differences in application numbers across offices, it is useful to compare their respective application and registration class counts.

**Community Plant Variety Office (CPVO) of the European Union (EU):** An EU agency that manages a system of plant variety rights covering the 27 EU member states.

**Complex technology:** A technology usually defined as one for which the resulting products or processes consist of numerous separately patentable elements, and for which patent ownership is typically widespread. For example, smartphones fall into the category of complex technologies.

**Contracting Party (Hague member):** A state or inter-governmental organization that is a member of the Hague System for the International Registration of Industrial Designs. The expression “contracting party” includes any state or intergovernmental organization party to the 1999 Act and/or the 1960 Act of the Hague Agreement. The entitlement to file an international application under the Hague Agreement is limited to natural persons or legal entities having a real and effective industrial or commercial establishment, or a domicile, in at least one of the contracting parties to the Agreement, or to nationals of one of these contracting parties, or of a member state of an intergovernmental organization that is a contracting party. In addition, but only under the 1999 Act, an international application may be filed on the basis of habitual residence in the jurisdiction of a contracting party.

**Designation:** The specification in an international registration of a Hague or Madrid member’s jurisdiction in which holders of registrations seek protection for their industrial designs or trademarks.

**Direct filing:** See “National route”.

**Discrete technology:** A technology describing products or processes that consist of a single and/or relatively few patentable elements, and for which patent ownership is relatively concentrated. For example, a pharmaceutical product is considered a discrete technology.

**Equivalent application:** Applications at regional offices are equivalent to multiple applications, one in each of the states that is a member of those offices. To calculate the number of equivalent applications for BOIP, EAPO, OAPI or OHIM data, each application is multiplied by the corresponding number of member states. For EPO and ARIPO data, each application is counted as one application abroad if the applicant does not reside in a member state; or as one resident and one application abroad if the applicant resides in a member state. The equivalent application concept is used for reporting data by origin.

**Equivalent grant (registration):** Grants (registrations) at regional offices are equivalent to multiple grants (registrations), one in each of the states that is a member of those offices. To calculate the number of equivalent grants (registrations) for BOIP, EAPO, OAPI or OHIM data, each grant (registration) is multiplied by the corresponding number of member states. For EPO and ARIPO data, each grant is counted as one grant abroad if the applicant does not reside in a member state; or as one resident and one grant abroad if the applicant resides in a member state. The equivalent grant (registration) concept is used for reporting data by origin.

**European Patent Convention (EPC):** The Convention on the Grant of European Patents, commonly known as the European Patent Convention (EPC), is a multilateral treaty instituting the European Patent Organisation and providing a legal system according to which European patents are granted. The EPC permits applicants to file a single application at the European Patent Office (EPO) and to designate any of the participating European countries.

**European Patent Office (EPO):** The EPO is the regional patent office created under the European Patent Convention (EPC), in charge of granting European patents for EPC member states. Under PCT procedures, the EPO acts as a receiving office, an international searching authority and an international preliminary examining authority.

**Filing:** See “Application”.

**Foreign-oriented patent families:** A patent family having at least one filing office that is different from the office of the applicant’s origin. (See “Patent Family”.)

**Grant:** A set of exclusive rights legally accorded to the applicant when a patent or utility model is “granted” or “issued”. (See “Patent” and “Utility model”.)

**Gross domestic product (GDP):** The total unduplicated output of economic goods and services produced within a country as measured in monetary terms.

**Hague international application:** An application for the international registration of an industrial design filed under the WIPO-administered Hague system.

**Hague international registration:** An international registration issued via the Hague system, which facilitates the acquisition of industrial design rights in multiple jurisdictions. An application for international registration of an industrial design leads to its recording in the International Register and the publication of the registration in the International Designs Bulletin. If the registration is not refused by the IP office of a designated Hague member, the international registration will have the same effect as a registration made in that jurisdiction.

**Hague route:** An alternative to the Paris route (direct route), the Hague route enables an application for international registration of industrial designs to be filed using the Hague system.

**Hague system:** The abbreviated form of the Hague System for the International Registration of Industrial Designs. This system consists of several international treaties (the London Act (currently frozen), the Hague Act and the Geneva Act). The Hague system makes it possible for an applicant to register up to 100 industrial designs in multiple jurisdictions by filing a single application with the International Bureau of WIPO. It simplifies the process of multinational registration by reducing the requirement to file separate applications with each IP office. The system also simplifies the subsequent management of the industrial design, since it is possible to record changes or to renew the registration through a single procedural step.

**In Force:** Refers to IP rights that are currently valid. To remain in force, IP protection must be maintained (see "Maintenance").

**Industrial design:** Industrial designs are applied to a wide variety of industrial products and handicrafts. They refer to the ornamental or aesthetic aspects of a useful

article, including compositions of lines or colors or any three-dimensional forms that give a special appearance to a product or handicraft. The holder of a registered industrial design has exclusive rights against unauthorized copying or imitation of the design by third parties. Industrial design registrations are valid for a limited period. The term of protection is usually 15 years for most jurisdictions. However, differences in legislation do exist, notably in China (which provides for a 10-year term from the application date) and the US (which provides for a 14-year term from the date of registration).

**Intellectual property (IP):** Refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images and designs used in commerce. IP is divided into two categories: industrial property, which includes patents, utility models, trademarks, industrial designs and geographical indications of source; and copyright, which includes literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs. Rights related to copyright include those of performing artists in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programs.

**International Bureau (IB):** In the context of the PCT, Hague and Madrid systems, the International Bureau of WIPO acts as a receiving office for international applications from all contracting states/parties. It also handles processing tasks with respect to these applications and the subsequent management of Hague and Madrid registrations.

**International Depositary Authority (IDA):** A scientific institution - typically a "culture collection" - capable of storing microorganisms that has acquired the status of an "international depositary authority" under the Budapest Treaty and that provides for the receipt, acceptance and storage of microorganisms and the furnishing of samples thereof. Presently, there are 41 such authorities.

**International Patent Classification (IPC):** The IPC provides for a hierarchical system of language-independent symbols for the classification of patents and utility models according to the different areas of technology to which they pertain. The symbols contain information relating to sections, classes, subclasses and groups.

**International Union for the Protection of New Varieties of Plants (UPOV):** An intergovernmental organization established by the International Convention for the Protection of New Varieties of Plants ("UPOV Convention"), which was adopted on December 2, 1961. UPOV provides and promotes an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants for the benefit of society.

**Invention:** A new solution to a technical problem. To obtain patent rights, the invention must be novel, involve an inventive step and be industrially applicable, as judged by a person skilled in the art.

**Locarno Classification (LOC):** The abbreviated form of the International Classification for Industrial Designs under the Locarno Agreement used for registering industrial designs. The LOC comprises a list of 32 classes and their respective subclasses, with explanatory notes and an alphabetical list of goods in which industrial designs are incorporated, and an indication of the classes and subclasses into which they fall.

**Madrid international application:** An application for the international registration of a trademark filed under the WIPO-administered Madrid Agreement or Madrid Protocol.

**Madrid international registration:** An international registration issued via the Madrid system, which facilitates the acquisition of trademark rights in multiple jurisdictions. An application for international registration of a trademark leads to its recording in the International Register and the publication of the registration in the WIPO Gazette of International Marks. If the registration is not refused by the IP office of a designated Madrid member, the

international registration will have the same effect as a registration made in that jurisdiction.

**Madrid route:** An alternative to the Paris route (direct route), the Madrid route enables an application for international registration of a trademark to be filed using the Madrid system.

**Madrid system:** The abbreviated form of the Madrid System for the International Registration of Marks, established under the Madrid Agreement and the Madrid Protocol and administered by WIPO. The Madrid system makes it possible for an applicant to register a trademark in a large number of countries by filing a single application at their national or regional IP office that is party to the system. The Madrid system simplifies the process of multinational trademark registration by reducing the requirement to file separate applications at each office. It also simplifies the subsequent management of the mark, since it is possible to record changes or to renew the registration through a single procedural step. Registration through the Madrid system does not create an "international" trademark, and the decision to register or refuse the trademark remains in the hands of national and/or regional office(s). Trademark rights are limited to the jurisdiction of the trademark registration office(s).

**Maintenance:** An act by the applicant to keep the IP grant/registration valid (in force), primarily by paying the required fee to the IP office of the state/jurisdiction providing protection. The fee is also known as a "maintenance fee". A trademark can be maintained indefinitely by paying renewal fees; however, patents, utility models and industrial designs can only be maintained for a limited number of years. (See "Renewal".)

**Microorganism deposit:** the transmittal of a microorganism to an international depositary authority (IDA), which receives and accepts it, or the storage of such a microorganism by the IDA, or both transmittal and storage.

**National Phase Entry (NPE):** See "National Phase under the PCT".

**National Phase under the PCT:** This follows the international phase of the PCT procedure, and consists of the entry and processing of the international application in the individual countries or regions in which the applicant seeks protection for an invention.

**National route:** Applications for IP protection filed directly with the national office of or acting for the relevant state/jurisdiction (see also “PCT route”, “Hague route” or “Madrid route”). National route is also called the “direct route” or “Paris route”.

**Nice Classification (NCL):** The abbreviated form of the International Classification of Goods and Services for the Purposes of Registering Marks under the Nice Agreement. The Nice Classification is divided into 34 classes for goods and 11 for services.

**Non-Resident:** For statistical purposes, a “non-resident” application refers to an application filed with the IP office of or acting for a state/jurisdiction in which the first-named applicant in the application does not have residence. For example, an application filed with the JPO by an applicant residing in France is considered a non-resident application from the perspective of this office. Non-resident applications are sometimes referred to as foreign applications. A non-resident grant or registration is an IP right issued on the basis of a non-resident application.

**Origin (Country/Region):** For statistical purposes, the “origin” of an application means the country/territory of residence of the first-named applicant in the application. In some cases (notably in the US), the country of origin is determined by the residence of the assignee instead of that of the applicant.

**Paris Convention:** The Paris Convention for the Protection of Industrial Property (1883), signed on March 20, 1883, is one of the most important IP treaties. It establishes the “right of priority” that enables an IP applicant, when filing an application in countries other than the original country of filing, to claim priority of an earlier application filed up to 12 months previously.

**Paris route:** An alternative to the PCT, Hague or Madrid routes, the Paris route (also called the “direct route”) enables individual IP applications to be filed directly with an office that is a signatory of the Paris Convention.

**Patent:** A set of exclusive rights granted by law to applicants for inventions that are new, non-obvious and commercially applicable. It is valid for a limited period of time (generally 20 years), during which patent holders can commercially exploit their inventions on an exclusive basis. In return, applicants are obliged to disclose their inventions to the public in a manner that enables others, skilled in the art, to replicate the invention. The patent system is designed to encourage innovation by providing innovators with time-limited exclusive legal rights, thus enabling innovators to appropriate a return on their innovative activity.

**Patent Cooperation Treaty (PCT):** The PCT is an international treaty, administered by WIPO. The PCT system facilitates the filing of patent applications worldwide and makes it possible to seek patent protection for an invention simultaneously in each of a large number of countries by first filing a single “international” patent application. The granting of patents, which remains under the control of the national or regional patent offices, is carried out in what is called the “national phase” or “regional phase”.

**Patent Family:** A set of interrelated patent applications filed in one or more countries/jurisdictions to protect the same invention.

**Patent opposition:** An administrative process for disputing the validity of a granted patent that is often limited to a specific time period after the patent has been granted. For example, at the EPO anyone may oppose a patent within nine months of publication of the grant of the European patent in the European Patent Bulletin.

**PCT Filing:** Abbreviated form of “PCT International Application”.

**PCT International Application:** A patent application filed through the WIPO-administered Patent Cooperation Treaty (PCT).

**PCT-Patent Prosecution Highway Pilots (PCT-PPH):** A number of bilateral agreements signed between patent offices enable applicants to request a fast-track examination procedure, whereby patent examiners can make use of the work products of another office or offices. These work products can include the results of a favorable written opinion by an ISA, the written opinion of an IPEA or the international preliminary report on patentability (IPRP) issued within the framework of the PCT. By requesting this procedure, applicants can generally obtain patents from participating offices more quickly.

**PCT route:** Patent applications filed or patents granted based on PCT international applications.

**PCT system:** The PCT, an international treaty administered by WIPO, facilitates the acquisition of patent rights in a large number of jurisdictions. The PCT system simplifies the process of multiple national patent filings by reducing the requirement to file a separate application in each jurisdiction. However, the decision of whether to grant patent rights remains in the hands of national and regional patent offices, and patent rights remain limited to the jurisdiction of the patent-granting authority. The PCT international application process starts with the international phase, during which an international search and possibly a preliminary examination are performed, and concludes with the national phase, during which national and regional patent offices decide on the patentability of an invention according to national law.

**Pending patent application:** In general, a patent application filed with a patent office and for which no patent has yet been granted or refused nor the application withdrawn. In jurisdictions where a request for examination is obligatory to start the examination process, a pending application may refer to an application for which a request for examination has been received but for which no patent has been granted or refused, nor the application withdrawn.

**Plant Patent Act (PPA) of the US:** Under the law commonly known as the “Plant Patent Act”, whoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, may obtain a patent therefor.

**Plant Variety:** According to the UPOV Convention, “variety” means a plant grouping within a single botanical taxon of the lowest known rank, which, irrespective of whether the conditions for the grant of a breeder’s right are fully met, can be (a) defined by the expression of the characteristics resulting from a given genotype or combination of genotypes; (b) distinguished from any other plant grouping by the expression of at least one of the said characteristics; and (c) considered as a unit with regard to its suitability for being propagated unchanged.

**Plant Variety Grant:** Under the UPOV Convention, the breeder’s right is only granted (title of protection is issued) where the variety is new, distinct, uniform, stable and has a suitable denomination.

**Plant Variety Protection Act (PVPA) of the US:** Under the PVPA, the US protects all sexually reproduced plant varieties and tuber propagated plant varieties excluding fungi and bacteria.

**Prior art:** All information disclosed to the public about an invention, in any form, before a given date. Information on prior art can assist in determining whether the claimed invention is new and involves an inventive step (is non-obvious) for the purposes of international searches and international preliminary examination.

**Priority date:** The filing date of the application on the basis of which priority is claimed.

**Publication date:** The date on which an IP application is disclosed to the public. On that date, the subject matter of the application becomes “prior art”.

**Regional Application/Grant (Registration):** An application filed with or granted (registered) by a regional IP office having jurisdiction over more than one country. Regional IP offices in operation include: the African Regional Intellectual Property Organization (ARIPO), the Benelux Office for Intellectual Property (BOIP), the Eurasian Patent Office (EAPO), the European Patent Office (EPO), the African Intellectual Property Organization (OAPI) and the Office for Harmonization in the Internal Market (OHIM) of the EU.

**Regional route (or regional direct):** Applications for IP protection filed or granted based on applications filed with a regional IP office.

**Registered Community Design (RCD):** A registration issued by the Office for Harmonization in the Internal Market (OHIM) based on a single application filed directly with this office by an applicant seeking protection within the EU as a whole.

**Registration:** A set of exclusive rights legally accorded to the applicant when an industrial design or trademark is “registered” or “issued”. (See “Industrial design” or “Trademark”.) Registrations are issued to applicants to make use of and exploit their industrial design or trademark for a limited period of time and can, in some cases, particularly in the case of trademarks, be renewed indefinitely.

**Renewal:** The process by which the protection of an IP right is maintained (i.e., kept in force). This usually consists of paying renewal fees to an IP office at regular intervals. If renewal fees are not paid, the registration may lapse. (See “Maintenance”.)

**Research and development (R&D) expenditure:** The money spent on creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge related to human culture and society, and the use of this stock of knowledge to devise new applications.

**Resident:** For statistical purposes, a “resident” application refers to an application filed with the IP office of or acting for the state/jurisdiction in which the first-named applicant in the application has residence. For example, an application filed with the Japan Patent Office (JPO) by a resident of Japan is considered a resident application for the JPO. Resident applications are sometimes referred to as domestic applications. A resident grant/registration is an IP right issued on the basis of a resident application.

**Trademark:** A trademark is a distinctive sign that identifies certain goods or services as those produced or provided by a specific person or enterprise. The holder of a registered trademark has the legal right to exclusive use of the mark in relation to the products or services for which it is registered. The owner can prevent unauthorized use of the trademark, or a confusingly similar mark, so as to prevent consumers and the public in general from being misled. Unlike patents, trademarks can be maintained indefinitely by paying renewal fees. The procedures for registering trademarks are governed by the rules and regulations of national and regional IP offices. Trademark rights are limited to the jurisdiction of the authority that registers the trademark. Trademarks can be registered by filing an application at the relevant national or regional office(s), or by filing an international application through the Madrid system.

**Utility Model:** A special form of patent right granted by a state/jurisdiction to an inventor or the inventor’s assignee for a fixed period of time. The terms and conditions for granting a utility model are slightly different from those for normal patents (including a shorter term of protection and less stringent patentability requirements). The term “utility model” can also describe what are known in certain countries as “petty patents”, “short-term patents” or “innovation patents”.

**Validation:** Procedure by which patent protection is validated post-grant at the offices designated in an EPO patent grant. The procedure varies among European offices but usually involves a translation into the national language and/or a payment of fees.

**World Intellectual Property Organization (WIPO):**

A United Nations specialized agency with a mandate from its Member States to promote the protection of IP throughout the world through cooperation among states and in collaboration with other international organizations. WIPO is dedicated to developing a balanced and effective international IP system that rewards creativity, stimulates innovation and contributes to economic development while safeguarding the public interest.

# LIST OF ABBREVIATIONS

ARIPO	African Regional Intellectual Property Organization
BOIP	Benelux Office for Intellectual Property
CPVO	Community Plant Variety Office of the European Union
EAPO	Eurasian Patent Organization
EPO	European Patent Office
EU	European Union
GDP	Gross Domestic Product
IB	International Bureau
ID	Industrial Design
IDA	International Depository Authority
IP	Intellectual Property
IPC	International Patent Classification
JPO	Japan Patent Office
KIPO	Korean Intellectual Property Office
OAPI	African Intellectual Property Organization
OHIM	Office for Harmonization in the Internal Market
PCT	Patent Cooperation Treaty
PCT NPE	Patent Cooperation Treaty National Phase Entry
PPA	Plant Patent Act of the United States of America
PPP	Purchasing Power Parity
PVPA	Plant Variety Protection Act of the United States of America
R&D	Research and Development
RCD	Registered Community Design
SIPO	State Intellectual Property Office of the People's Republic of China
UM	Utility Model
UPOV	International Union for the Protection of New Varieties of Plants
USPTO	United States Patent and Trademark Office
WIPO	World Intellectual Property Organization